Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

- 1-39. (cancelled)
- 40. (currently amended): A protein of approximately 17 kDa as determined by SDS PAGE encoded by one of SEQ ID Nos 1, 3, or 5 NO 1, 3, 5 and sequences having similarity to SEQ ID NO 1, 3 and 5 that do not alter one of the immunogeneity and function of said protein.
- 41. (cancelled)
- 42. (currently amended): The approximately 17 kDa protein of claim 40, encompassing amino acid substitutions, additions and deletions that do not alter one of the immunogenicity and the function of said protein protein of claim 40, wherein said protein is encoded by one of SEQ ID NO 1, 3 and 5.
- 43. (currently amended): A protein of approximately 17 kDA protein ranging from 15.5 to 17.7 kDa as determined by SDS PAGE wherein said protein is immunoreactive with anti-P. salmonis serum.
- 44-49. (cancelled)

- 50. (new): A protein of 17 kDa as determined by SDS PAGE comprised of the amino acid sequence of one of SEQ ID NO 2, 4, 6 and variants of SEQ ID NO 2, 4 and 6 that do not alter one of the immunogencity or function of said protein.
- 51. (new): The protein of claim 50 wherein the amino acid sequence is selected from one of SEQ ID NO 2, 4 and 6.
- 52. (new): The protein of claim 50 wherein the protein or variants thereof are fused to at least one other protein or protein fragment either at the N or C terminus or both.
- 53. (new): The protein of claim 52 wherein those proteins or protein fragments are lymphocyte T cell epitopes or lymphocyte T cell epitopes and lymphocyte B cell epitopes.
- 54. (new): The protein of claim 52 wherein the protein or variants thereof are post-translationally modified into a lipoprotein.
- 55. (new): The protein of claim 52 wherein the lymphocyte T cell epitopes are highly immunogenic promiscuous T cell epitopes.